REMARKS

After entry of the present Amendment, claims 1-9, 11-18, and 20-27 remain in the application with claims 1 and 12 in independent form. Claims 1 and 12 have been amended and claims 23-27 have been added. Claims 10 and 19 were previously cancelled. There is full support in the specification as originally filed for the amendments to claims 1 and 12 and for added claims 23-27. Thus, no new matter has been introduced.

Notably, the Applicant has amended independent claims 1 and 12 by broadening these claims "back out" to their original scope. As described in detail below, the Applicant traverses the Examiner's various 35 U.S.C. § 103(a) rejections focusing on the impropriety of the prior art combinations made and relied upon by the Examiner, and the resulting lack of *prima facie* obviousness.

As a result of amending independent claims 1 and 12, the Applicant has also introduced new dependent claims 23 and 24. These two claims are simply a reintroduction of original dependent claims 10 and 19, respectively. As for new dependent claims 25 and 26, support for these new claims is found in Paragraph [0027] of the original specification. As for new dependent claim 27, support for this new claim is found in Paragraph [0025] of the original specification.

Independent claim 1 and dependent claims 2-9, 11, and 23:

Summary of the Scope of Independent Claim 1 (as amended)

A method of kinetic spray coating a substrate covered by a plastic-type material is claimed. More specifically, claim 1 sets forth, among other elements, that the particles involved in this particular method have an average nominal diameter of from 60 to 250 microns. A mask is provided in this particular method. The mask has at least one opening

therein, and the mask is pressed against the plastic-type material. The particles are kinetically sprayed by entraining the particles in the flow of a heated main gas and are accelerated to a velocity sufficient to result in the particles passing through the opening in the mask. The plastic-type material is removed and the particles are adhered.

As explained in the original specification (*see, for example, Paragraphs [0030] – [0031]*), there are surprising advantages associated with the use of a mask with particles having an average nominal diameter in the claimed range (60 to 250 microns). Specifically, the mask is necessary to eliminate potential electrical shorting between adjacent conductors. In using the mask, the kinetic spray parameters can be more aggressive and surprisingly it has been found that the initial particles strike with sufficient force to completely remove the plastic overlayer and subsequent particles bind directly to the conductor.

Rejections

Claims 1-6, 9, and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Rayburn (US 3731354) in view of Tawfik et al. (US 2004/0101738), Van Steenkiste et al. (US 6283386), Hathaway (US 2599710), and McCane et al. (US 6592947). Because the Examiner relies on McCane et al. for traverse speed and because the Applicant has amended this element out of independent claim 1, the Applicant, for purposes of discussion in this Amendment, will treat this rejection as claims 1-6, 9, and 11 standing rejected under 35 U.S.C. § 103(a) as being unpatentable over Rayburn (US 3731354) in view of Tawfik et al. (US 2004/0101738), Van Steenkiste et al. (US 6283386), and Hathaway (US 2599710).

Claims 1-6, 9, and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Rayburn (US 3731354) in view of Tawfik et al. (US 2004/0101738), Van Steenkiste et al. (US 6623796), Hathaway (US 2599710), and McCane et al. (US 6592947). Because the

Examiner relies on McCane et al. for traverse speed and because the Applicant has amended this element out of independent claim 1, the Applicant, for purposes of discussion in this Amendment, will treat this rejection as claims 1-6, 9, and 11 standing rejected under 35 U.S.C. § 103(a) as being unpatentable over Rayburn (US 3731354) in view of Tawfik et al. (US 2004/0101738), Van Steenkiste et al. (US 6623796), and Hathaway (US 2599710).

Claims 1-6, 9, and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Rayburn (US 3731354) in view of Tawfik et al. (US 2004/0101738), Van Steenkiste et al. (US 6283386), Hathaway (US 2599710), and either (a) Elmoursi et al. (US 2003/0219576), (b) Zhao et al. (US 2005/0040260), or (c) Van Steenkiste et al. (US 2004/0157000). Because the Examiner relies on prior art references (a)-(c) for traverse speed (*see Page 39, Paragraph 25 of the Examiner's Office Action*) and because the Applicant has amended this element out of independent claim 1, the Applicant, for purposes of discussion in this Amendment, will treat this rejection as claims 1-6, 9, and 11 standing rejected under 35 U.S.C. § 103(a) as being unpatentable over Rayburn (US 3731354) in view of Tawfik et al. (US 2004/0101738), Van Steenkiste et al. (US 6283386), and Hathaway (US 2599710).

Claims 1-6, 9, and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Rayburn (US 3731354) in view of Tawfik et al. (US 2004/0101738), Van Steenkiste et al. (US 6623796), Hathaway (US 2599710), and either (a) Elmoursi et al. (US 2003/0219576), (b) Zhao et al. (US 2005/0040260), or (c) Van Steenkiste et al. (US 2004/0157000). Because the Examiner relies on prior art references (a)-(c) for traverse speed (*see Page 39, Paragraph 25 of the Examiner's Office Action*) and because the Applicant has amended this element out of independent claim 1, the Applicant, for purposes of discussion in this Amendment, will treat this rejection as claims 1-6, 9, and 11 standing rejected under 35 U.S.C. § 103(a) as being

unpatentable over Rayburn (US 3731354) in view of Tawfik et al. (US 2004/0101738), Van Steenkiste et al. (US 6623796), and Hathaway (US 2599710).

The Applicant will treat the Examiner's rejections of claim 7 [relying further on Martyniak (US 4263341)] and claim 8 [relying further on Kashirin et al. (US 6402050)] in a similar fashion.

Traversing Arguments

As alluded to above, the Applicant respectfully traverses the Examiner's §103(a) rejections of claims 1-9, and 11. More specifically, the Applicant contends that the Examiner has not established the requisite *prima facie* case of obviousness. In so doing, the Applicant herein incorporates by reference all of the arguments already set forth in Section VII of the Appeal Brief dated October 4, 2005. The following additional arguments focus on the Examiner's two different '4-Way' combinations necessary to arrive at the claimed invention;

1. Rayburn / Tawfik et al. / Van Steenkiste et al. '386 / and Hathaway, and
2. Rayburn / Tawfik et al. / Van Steenkiste et al. '796 / and Hathaway.

These focused, additional arguments make clear the lack of *prima facie* obviousness and the resulting impropriety in the Examiner's rejections.

As the Examiner is aware, to appropriately establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify a reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Third, the prior art reference must teach or suggest all the claim limitations. See *MPEP 2142*. Notably, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found

in the prior art and not based on Applicant's disclosure.[1] This last principle is commonly referred to as impermissible hindsight. MPEP 2142 mandates that "...impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art."

Rayburn / Tawfik et al. / Van Steenkiste et al. '386 / and Hathaway

Relative to the combination of these four references, the Applicant respectfully asserts that the Examiner has failed to satisfy the first criterion, i.e., a suggestion or motivation to combine all four of these teachings together, required to appropriately establish the *prima facie* case of obviousness.

The cases of *In re Sang Su Lee*[2] and *Princeton Biochemicals, Inc. v. Beckman Coulter, Inc.*[3] clarify the law and the Examiner's responsibilities relative to the first criterion. The more applicable and recent case, *Princeton*, is discussed immediately below. In June of 2005, the Court of Appeal for the Federal Circuit (CAFC) reiterated the principles involved in assessing the differences between the prior art and the claimed invention when addressing the first criterion...in the subject application, the motivation to combine Rayburn, Tawfik et al., Van Steenkiste et al. '386, and Hathaway. See *Princeton*. In *Princeton*, citing *Ruiz v. A.B. Chance Co.*, 357 F.3d 1270, 1275 (Fed. Cir. 20044), the CAFC emphasized that a rejection under 35 U.S.C. § 103 specifically requires consideration of the claimed invention "as a whole." Relating to this "as a whole" issue, the CAFC went further to emphasize that

> [i]nventions typically are new combinations of existing principles or features. *Envtl. Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 698 (Fed. Cir. 1983) (noting that "virtually all [inventions] are combinations of old elements"). The "as a whole" instruction in title 35 prevents evaluation of the invention part by part. *Ruiz*, 357 F.3d at 1275. Without this

[1] *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q. 2d 1438 (Fed. Cir. 1991).
[2] 277 F.3d 1338 (Fed. Cir. 2002).
[3] 411 F.3d 1332 (Fed. Cir. 2005).

important requirement, an obviousness assessment might successfully break an invention into its component parts, then find a prior art reference corresponding to each components. *Id.* This line of reasoning would import hindsight into the obviousness determination by using the invention as a roadmap to find its prior art components. Further, this improper method would discount the value of combining various existing features or principles in a new way to achieve a new result – **often the essence of the invention**. *Id.*

Contrary to this reasoning, section 103 requires assessment of the invention as a whole. *Id.* This "as a whole" assessment of the invention requires a showing that an artisan of ordinary skill in the art at the time of the invention, confronted by the same problems as the invention and **with no knowledge of the claimed invention**, would have selected the various elements from the prior art and combined them in the claimed manner. *Id.* In other words, section 103 requires some suggestion or motivation, **before the invention itself**, to make the new combination. (emphasis added).

In relation to the rejection of claims 1-9 and 11, the Examiner has failed to point any specific teaching, suggestions, or motivations found within the references themselves for combining the references and/or for modifying the teachings to render the Applicant's invention obvious. What the Examiner has done is take the Applicants' invention and use it as a blueprint for finding these four cited references and this is impermissible hindsight. The cited references can not properly be combined and even assuming they could, they do not make the present invention obvious. It can be simply stated that there is no motivation to combine the thermal spray methods of Rayburn, Hathaway, and most of Tawfik et al. with the kinetic spray method of Van Steenkiste et al. '386. The clear lack of motivation in combining the teachings of thermal spray methods with teachings of kinetic spray methods was already described in the Appeal Brief. Relevant portions of this description are repeated below.

The primary reference, Rayburn, teaches a method for making a multilayer plastic chip capacitor that includes a thermal spraying step. The thermal spraying is used to form a contact between alternate electrode layers which extend to a common end of the capacitor to place all of the electrodes in the electric field. Column 1, line 59 through column 2, line 8. The molten

aluminum "embeds itself in the plastic coatings between the metalized layers so as to contact the surface as well as the ends of the electrodes, but does not substantially penetrate the plastic dielectric strip". Column 2, lines 2-5. The form of thermal spraying of metals onto metal as disclosed in Rayburn relies on using an oxygen-acetylene flame to melt an aluminum wire. The molten aluminum is then broken up into molten droplets using a high velocity air stream and the molten droplets are directed toward a substrate. This thermal spray process is completely the opposite of the kinetic spray method used in the present invention.

All thermal spray processes include a spray system that performs different functions in a completely different way to achieve a different result from the kinetic spray systems as used in the present invention. The cited references Rayburn, most of Tawfik et al., and Hathaway are thermal spray systems. Common to all thermal spray systems is the concept of heating a material to be sprayed to a temperature well above its melting point to produce a molten material. The molten material is then sprayed at a substrate surface while it is still molten where it will bind to the surface as it cools and resolidifies. All thermal spray processes are high temperature processes. In contrast, kinetic spray processes are low temperature processes wherein the particles being sprayed are never heated to a temperature anywhere near their melting temperature. Instead kinetic spray relies on the principal of accelerating the particles to a velocity above their critical velocity and using the generated kinetic energy of the particles to cause a bond between the substrate and the particle when the particle strikes the substrate. In a kinetic spray process, the physical state of the particles never changes where as in a thermal spray process the particles do change their physical state. Because these processes are fundamentally different, the teachings of Rayburn, Tawfik et al, and Hathaway with respect to a thermal spraying process are inapplicable to the present invention.

The Examiner admits that Rayburn does not teach kinetic spraying and its features that are recited in claim 1 nor does Rayburn teach the masking also required in claim 1. In fact, Rayburn teaches nothing that is relevant to the invention as claimed in claim 1 and it teaches away from the kinetic spray method as recited in claim 1. Any removal of plastic in Rayburn is due to the high temperature of the molten aluminum, which must be above 660° C, the melting temperature of aluminum.

Tawfik et al. teaches a method of coating a metal substrate directly with a metal corrosion resistant layer, again by using a thermal spray process. In passing Tawfik et al. suggests that cold gas dynamic spraying may be useful to coat a metal with a metal when one is concerned about thermal distortion of the substrate. Tawfik et al., however does not disclose any details of a kinetic spray process. As stated in paragraph [0039] of Tawfik et al. "[t]hus, the inventive bipolar plate 10 is an all-metallic structure including the metal substrate layer, the corrosion resistant layer formed in the boundary region or interface". Thus, Tawfik et al. at most teaches a thermal spray method for coating a metal with a metal. Only in passing does Tawfik et al. mention use of kinetic spray to coat a metal substrate with a metal. The Examiner suggests Tawfik et al. teaches using kinetic spraying when embedding particles into a substrate like plastic to avoid overheating as caused by thermal spraying, however, even if this were what Tawfik et al. teaches, it is inapplicable to the present invention because no particles are being embedded in the present invention as claimed in claim 1. In contrast, claim 1 requires that the particles remove the plastic-type material and adhere to the substrate below, thus there is no "embedding" occurring.

Van Steenkiste et al. '386 teaches a kinetic spray method, again for coating a metal substrate with a metal. Van Steenkiste et al. '386 provides two tables of data all of which are

metal particles applied to a metal substrate, brass. There is no suggestion, teaching, or motivation within any of the references for combining Rayburn, Tawfik et al., and Van Steenkiste et al. '386. Even if it were to be appropriate to combine these references, the most that such a combination would teach would be that a metal substrate can be **directly coated** with metal particles either by a thermal spray process or a kinetic spray process. None of the references discuss or suggest that the kinetic spray process can be used to spray through a plastic-type coating to remove it and then adhere to the substrate under it.

Hathaway, like Rayburn, is a thermal spray process. More specifically, Hathaway teaches using masking tape adhesively applied to a dielectric as a mask, sandblasting grooves in the dielectric, and then filling the sandblast formed groove by a thermal spray process.

Granted, one must also consider knowledge that is generally available to one of ordinary skill in the art when determining whether it is appropriate to combine the teachings of two different references. However, as already discussed at length above, when doing so, i.e., when considering the knowledge that is generally available to one of ordinary skill in the art, the teaching or suggestion to make the claimed combination must (1) be found in the prior art, i.e., in the knowledge of those skilled in the art, and (2) not based on the Applicant's disclosure.

To rely on the combination invention claimed in the subject application and then sift through the prior art looking for the invention claimed in the subject application is impermissible hindsight as discussed above and the Examiner cannot engage is such conduct.[4]

For the Examiner to reach a proper determination under 35 U.S.C. § 103:

> The examiner must step backward in time and into the shoes worn by the hypothetical "person of ordinary skill in the art" when the invention was unknown and just before it was made. In view of all factual information, the examiner must

[4] The courts have also indicated that it is impermissible to use the inventor's disclosure as a road map for *selecting* and combining prior art disclosures.

> then make a determination whether the claimed invention "as a whole" would have been obvious at that time to that person. Knowledge of applicant's disclosure must be put aside in reaching this determination, yet kept in mind in order to determine the "differences," conduct the search and evaluate the "subject matter as a whole" of the invention. The tendency to resort to "hindsight" based upon applicant's disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.

In summary, the Examiner can point to no suggestions, teachings, or motivations within the cited references for combining the cited references other than use of the Applicants' invention as a template for locating the references. Even if combination were to be appropriate, the cited references fail to teach or make obvious each and every limitation of independent claim 1. The references Rayburn, Tawfik et al., and Van Steenkiste et al. '386 at most **teach directly coating** a metal substrate with a metal either by a thermal spray or a kinetic spray process. None of these references, even in combination, teach or make obvious a kinetic spray process for coating a plastic covered substrate with particles having a size of from 60 to 250 microns that are kinetically sprayed wherein the particles pass through an opening in a mask pressed against the plastic covering, the sprayed particles first removing the plastic material and then bonding or adhering to the substrate. Thus, the rejection of independent claim 1 under 35 U.S.C. § 103(a) based on Rayburn, Tawfik et al., Van Steenkiste et al. '386, and Hathaway is improper and must be withdrawn.

Rayburn / Tawfik et al. / Van Steenkiste et al. '796 / and Hathaway

Relative to the combination of these four references, the Applicant respectfully asserts that the Examiner has, once again, failed to satisfy the first criterion, i.e., a suggestion or motivation to combine all four of these teachings together, required to appropriately establish the *prima facie* case of obviousness. Because Van Steenkiste et al. '796 merely adds

an increased average nominal diameter of the particles (of up to 250 microns) to the disclosure and teachings of Van Steenkiste et al. '386, the arguments above apply here as well. That is, Van Steenkiste '796 does nothing to remedy the lack of motivation existing within the prior art to make the 4-Way combination that the Examiner is making to establish the *prima facie* case of obviousness. Thus, the rejection of independent claim 1 under 35 U.S.C. § 103(a) based on Rayburn, Tawfik et al., Van Steenkiste et al. '796, and Hathaway is improper and must be withdrawn.

Independent claim 1, as described above, is in allowable form. Furthermore, dependent claims 2-9, 11, and 23 depend directly or indirectly from the novel and non-obvious features of this independent claim, such that these claims are also allowable.

Independent claim 12 and dependent claims 13-18, 20-22, and 24-27:

Summary of the Scope of Independent Claim 12 (as amended)

A method of kinetic spray coating a substrate covered by a plastic-type material is claimed. More specifically, claim 1 sets forth, among other elements, that the particles involved in this particular method have an average nominal diameter of from 250 to 1400 microns (as distinguished from 60 to 250 microns in claim 1). These larger particles are kinetically sprayed by entraining the particles in the flow of a heated main gas and are accelerated to a velocity sufficient to result in the particles passing through the plastic-type material. The particles are then adhered.

As explained in the original specification (*see, for example, Paragraphs [0025] and [0027]*), there are surprising advantages involving the claimed method and particles having an average nominal diameter in the claimed range (250 to 1400 microns). Specifically, with

this method, the particles are large enough that a single particle sprayed can bind to an underlying substrate and provide an electrical path from the substrate through the overlying plastic layer of plastic-type material. Particles of this size can be directly sprayed through the plastic onto the substrate. A schematic diagram of this phenomenon is even shown in Figure 3. Furthermore, with this method, it is possible that, in a single high speed pass, one can selectively coat conductors through a plastic layer to form electrical contact points or solder points. This was a previously unobtainable result.

Rejections

Claims 12-16, 18, and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Rayburn (US 3731354) in view of Tawfik et al. (US 2004/0101738), Van Steenkiste et al. (US 6283386), and McCane et al. (US 6592947). Because the Examiner relies on McCane et al. for traverse speed and because the Applicant has amended this element out of independent claim 12, the Applicant, for purposes of discussion in this Amendment, will treat this rejection as claims 12-16, 18, and 20 standing rejected under 35 U.S.C. § 103(a) as being unpatentable over Rayburn (US 3731354) in view of Tawfik et al. (US 2004/0101738) and Van Steenkiste et al. (US 6283386).

Claims 12-16, 18, and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Rayburn (US 3731354) in view of Tawfik et al. (US 2004/0101738), Van Steenkiste et al. (US 6623796), and either (a) Elmoursi et al. (US 2003/0219576), (b) Zhao et al. (US 2005/0040260), or (c) Van Steenkiste et al. (US 2004/0157000). Because the Examiner relies on prior art references (a)-(c) for traverse speed (*see Page 39, Paragraph 25 of the Examiner's Office Action*) and because the Applicant has amended this element out of independent claim 12, the Applicant, for purposes of discussion in this Amendment, will treat this rejection as

claims 12-16, 18, and 20 standing rejected under 35 U.S.C. § 103(a) as being unpatentable over Rayburn (US 3731354) in view of Tawfik et al. (US 2004/0101738) and Van Steenkiste et al. (US 6623796).

The Applicant will treat the Examiner's rejections of claim 17 [relying additionally on Kashirin et al. (US 6402050)] and claims 21-22 [relying additionally on Martyniak (US 4263341)] in a similar fashion.

Traversing Arguments

As alluded to above, the Applicant respectfully traverses the Examiner's §103(a) rejections of claims 12, 13-18 and 20-22. More specifically, the Applicant contends that the Examiner has not established the requisite *prima facie* case of obviousness. In so doing, the Applicant herein incorporates by reference all of the arguments already set forth in Section VII of the Appeal Brief dated October 4, 2005. The following additional arguments focus on the Examiner's two different '3-Way' combinations necessary to arrive at the claimed invention;

1. Rayburn / Tawfik et al. / and Van Steenkiste et al. '386, and
2. Rayburn / Tawfik et al. / and Van Steenkiste et al. '796.

These focused, additional arguments make clear the lack of *prima facie* obviousness and the resulting impropriety in the Examiner's rejections.

The same criteria outlined above for appropriate establishment of the *prima facie* case of obviousness apply here.

Rayburn / Tawfik et al. / and Van Steenkiste et al. '386

Relative to this rejection and the combination of these three references, the Applicant respectfully asserts that the Examiner has failed to satisfy both the first and third criterion. That is, as already explained above, the Examiner has failed to provide an adequate

suggestion or motivation to combine all three of these teachings together as required to appropriately establish the *prima facie* case of obviousness. Even further, the Examiner has failed to establish that even assuming an appropriate combination, the combination of Rayburn, Tawfik et al., and Van Steenkiste et al. '386 teach or suggest all of the claim limitations.

The First Criterion, Motivation to Combine

The arguments set forth immediately above and in the Appeal Brief dated October 4, 2005 apply here also. The Examiner has failed to point any specific teaching, suggestions, or motivations found within the references themselves for combining the references and/or for modifying the teachings to render the Applicant's invention obvious. What the Examiner has done is take the Applicants' invention and use it as a blueprint for finding these three cited references and this is impermissible hindsight. The cited references can not properly be combined and even if they could, they do not make the present invention obvious. It can be simply stated that there is no motivation to combine the thermal spray methods of Rayburn and most of Tawfik et al. with the kinetic spray method of Van Steenkiste et al. '386. The clear lack of motivation in combining the teachings of thermal spray methods with teachings of kinetic spray methods was already described in the Appeal Brief.

The Third Criterion, Teaching or Suggesting all of the Claim Limitations

If for argument's sake it is assumed that the Examiner has made an appropriate combination, even the combination of Rayburn, Tawfik et al., and Van Steenkiste et al. '386 does not teach or suggest all of the required claim limitations. As set forth above in the "Summary of the Scope of Independent Claim 12 (as amended)", the particles used in the claimed method have an average nominal diameter of from 250 to 1400 microns. As

discussed, these particular particles are large enough that a single particle sprayed can bind to an underlying substrate and provide an electrical path from the substrate through the overlying plastic layer of plastic-type material, and these larger particles can be applied in a single pass. None of Rayburn, Tawfik et al., and Van Steenkiste et al. '386 disclose, teach, or suggest, alone or in combination, the particles having the diameter claimed. Rayburn indicates .001 inches (i.e., 25.4 microns), Tawfik et al. is entirely silent on the size of its particle, and Van Steenkiste et al. '386 indicates up to 106 microns.

Because the first and third criteria are not met, the requisite *prima facie* case of obviousness is not established and the rejection of independent claim 12 under 35 U.S.C. § 103(a) based on Rayburn, Tawfik et al., and Van Steenkiste et al. '386 is improper and must be withdrawn.

Rayburn / Tawfik et al. / and Van Steenkiste et al. '796

Relative to the combination of these three references, the Applicant respectfully asserts that the Examiner has, once again, failed to satisfy both the first and third criteria required to appropriately establish the *prima facie* case of obviousness. As already described above, because Van Steenkiste et al. '796 merely adds an increased average nominal diameter of the particles (of up to 250 microns) to the disclosure and teachings of Van Steenkiste et al. '386, the arguments above apply here as well. That is, Van Steenkiste '796 does nothing to remedy the lack of motivation existing within the prior art to make the 3-Way combination that the Examiner is making to establish the *prima facie* case of obviousness. Furthermore, Van Steenkiste et al. '796 only teaches particles with average nominal diameters up to 250 microns and the third criterion is not satisfied.

Because the first and third criteria are not met, the requisite *prima facie* case of obviousness is not established and the rejection of independent claim 12 under 35 U.S.C. § 103(a) based on Rayburn, Tawfik et al., and Van Steenkiste et al. '796 is improper and must be withdrawn.

Independent claim 12, as described above, is in allowable form. Furthermore, dependent claims 13-18, 20-22, and 24-27 depend directly or indirectly from the novel and non-obvious features of this independent claim, such that these claims are also allowable.

This application is now presented in condition for allowance, which allowance is respectfully solicited. The Commissioner is authorized to charge our deposit account no. 08-2789 for any additional fees or credit the account for any overpayment.

Respectfully submitted,

HOWARD & HOWARD ATTORNEYS

February 9, 2006
Date

David M. LaPrairie, Registration No. 46,295
Howard and Howard Attorneys, P.C.
The Pinehurst Office Center, Suite 101
39400 Woodward Ave.
Bloomfield Hills, MI 48304-5151
(248) 723-0442